

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

In the matter of:)	Complaint No. R4-2007-0035
)	Administrative Civil Liability for
The Boeing Company)	Violations of California Water Code § 13376
Santa Susana Field Laboratory)	and Order No. R4-2004-0111
)	(NPDES Permit No. CA0001309)

YOU ARE HEREBY GIVEN NOTICE THAT:

1. The Boeing Company (Permittee or Boeing) is alleged to have violated requirements contained in Regional Board Order No. R4-2004-0111 (NPDES Permit No. CA00001309) and California Water Code (CWC) § 13376, for which the Regional Water Quality Control Board, Los Angeles Region (Regional Board) may impose administrative civil liability under CWC § 13385.
2. The Permittee is alleged to have violated waste discharge requirements contained in Regional Board Order No. R4-2004-0111 by failing to comply with the effluent limitations during periods of discharge to receiving waters for the period of October 17, 2004 through January 14, 2006. During this time period, Seventy-nine (79) violations of Order No. R4-2004-0111 were noted in the Permittee's self-monitoring reports. These violations include effluent limit exceedances for the following parameters: antimony (Sb), biochemical oxygen demanding substances (BOD₅), chloride, chromium (Cr), copper (Cu), dioxins [2,3,7,8-tetrachlorobenzodioxin equivalents (TCDD)], iron (Fe), lead (Pb), manganese (Mn), mercury (Hg), methylene blue active substances (MBAS), nitrite plus nitrate as nitrogen ([NO₂+NO₃] as N), oil and grease (O&G), pH, strontium-90, sulfate, total dissolved solids (TDS), and total residual chlorine (TRC). The violations are identified in Table 1 attached hereto and incorporated herein by reference.
3. A hearing shall be conducted on this Complaint by the Regional Board or a Regional Board Hearing Panel (Hearing Panel) within 90 days after service of this Complaint on the Permittee pursuant to CWC §§ 13228.14 and 13323, unless the Permittee waives the hearing and pays the recommended penalty of \$471,190 by August 27, 2007. The Permittee and/or Permittee's representative(s) will have an opportunity to be heard and to contest the allegations in this Complaint and the imposition of administrative civil liability by the Regional Board. A notice containing the date, time, and location of the hearing will be mailed to the Permittee not less than ten (10) days prior to the hearing date.
4. The Regional Board will consider whether to affirm, reject, or modify the proposed administrative civil liability, or whether to refer the matter to the Attorney General for recovery of judicial civil liability in a greater amount.

July 25, 2007

THE FOLLOWING FACTS ARE THE BASIS FOR THE ALLEGED VIOLATIONS:

I. Facility Description

5. The Santa Susana Field Laboratory (SSFL) is located on 2,800 acres at the top of Woolsey Canyon, in Simi Hills, California. The developed portion of the site comprises approximately 1,500 acres. The SSFL is owned by both Boeing and the National Aeronautics and Space Administration (NASA). The United States Department of Energy (DOE) also owns several buildings located in a portion of the facility designated as Area IV, with the land being under the ownership of Boeing.
6. Boeing operations at SSFL since 1950 include research, development, assembly, disassembly, and testing of nuclear reactors, rocket engines, and chemical lasers. DOE conducted past operations in research and development of energy related programs, and seismic testing experiments. Current DOE activities onsite are solely related to facility closure, environmental remediation and restoration.
7. Historical Boeing activities at SSFL that contributed to discharges from the site included rocket engine testing cooling water, operation of fire suppression equipment, and pressure testing of equipment used to support rocket engine testing. Other facility support activities such as cooling, heating, domestic waste treatment, and groundwater treatment contributed to discharges from the site as well.
8. During the early 1950s to the mid-1970s, volatile organic compounds were utilized for the cleaning of hardware and rocket engine thrust chambers as well as other equipment. These solvents migrated into the subsurface, contaminating groundwater primarily with trichloroethylene (TCE) and 1,2-dichloroethylene (1,2-DCE). There is now an extensive groundwater remediation/investigation program in progress at the SSFL, which includes pumping, treating, and storing groundwater at the facility. The groundwater is treated to remove volatile, and in some cases semi-volatile, organic compounds. The treatment system is not designed to treat perchlorate or metals. Treated groundwater is discharged directly into one of five water reclamation ponds via naturally occurring streambeds and in some cases man made watercourses present onsite. The groundwater treatment system is regulated under RCRA hazardous waste permits or administrative orders issued by DTSC, and various air quality control permits issued by Ventura County.
9. Nine closed surface impoundments located at the SSFL are regulated under the Resource Conservation and Recovery Act (RCRA). The nine impoundments are closed and by the Department of Toxic Substances Control (DTSC) under two postclosure permits issued in 1995. These impoundments include: Engineering Chemistry Laboratory (ECL); Advanced Propulsion Test Facility (APTF) 1 & 2; Storable Propellant Area (SPA) 1 & 2; Systems Test Lab (STL) IV 1 & 2, Delta skim pond; and the Alfa Bravo skim pond. A tenth surface impoundment, the Propellant Load Facility (PLF), was "clean closed" and did not require a post closure permit.

10. Two activated sludge sewage treatment plants (STP 1 and STP 3) previously provided secondary and tertiary treatment for most of the domestic sewage generated onsite. Disinfected sewage effluent from the activated sludge facilities were directed to the reclaimed water system reservoirs (unlined ponds). Water from the reservoirs was routinely reused for industrial purposes. A third activated sludge sewage treatment plant (STP 2) is available, but was used only as a pump station to STP 3 and as a temporary storage of excess sewage. Operations terminated at STP 3 in October 2001 and at STP 1 in December 2001. Domestic sewage is currently being transported offsite.
11. There are no programs at the SSFL that currently employ special nuclear materials. Ongoing decommissioning activities have reduced the inventory of radioactive waste to approximately 5 curies. This material is stored in shielded vaults located at the Radioactive Materials Handling Facility (RMHF). The SSFL continues to utilize radioisotopes in the form of sources that are necessary to calibrate radiation detectors and counting equipment. Three radiological facilities located in Area IV of the SSFL remain to be decommissioned and storm water run-off from the area is monitored for radioactivity.
12. Waste streams that may contain trace quantities of certain toxic materials used in cleaning, assembly, testing, and support operations may also be generated and discharged to the receiving ponds.

II. Waste Discharge Description

13. Boeing currently discharges waste from the SSFL under waste discharge requirements, which serve as a National Pollutant Discharge Elimination System (NPDES) permit, contained in Order No. R4-2004-0111, which was adopted by the Regional Board on July 1, 2004 (NPDES Permit No. CA0001309), and amended by Order Nos. R4-2006-0008 and R4-2006-0036, which were adopted on January 19 and March 9, 2006 respectively.
14. The first amendment (R4-2006-0008) to Order No. R4-2004-0111 was the result of new information incorporated into the Order after one year of compliance and routine monitoring based on Monitoring and Reporting Program (MRP) No. 6027.
15. The second amendment (R4-2006-00036) to Order No. R4-2004-0111 incorporates the Waste Load Allocations (WLA) for Total Maximum Daily Loads (TMDLs) for the Los Angeles River and Calleguas Creek.
16. This Complaint only considers those violations, as identified in Table 1, which occurred during the effective dates of Order No. R4-2004-0111 prior to adoption of the two amendments described above.
17. The SSFL can discharge up to 272 million gallons per day (MGD) of storm water runoff from the facility. During storm events, approximately 60% of the discharge exits the

property via two southerly discharge points (Discharge Outfalls 001 and 002) to Bell Creek, a tributary to the Los Angeles River, a water of the United States.

18. The remaining storm water is discharged via Outfalls 003 through 007, 009 and 010 to the northwest toward the Arroyo Simi, a water of the United States; and Outfall 008 in Happy Valley towards Dayton Canyon Creek and via various drainages toward Arroyo Simi, Runkel, Dayton, and Woolsey Canyons. The storm water runoff from Happy Valley flows via Dayton Canyon Creek to Chatsworth Creek. Chatsworth Creek flows south to Bell Creek southwest of the intersection of Shoup Avenue and Sherman Way. Bell Creek subsequently flows southeast to the Los Angeles River.
19. The following table represents the SSFL's NPDES outfalls and their associated operation:

Outfall	Operation
001	Wastewater and storm water run-off
002	Wastewater and storm water run-off
003	Storm water Radioactive Materials Handling Facility
004	Storm water Sodium Reactor
005	Storm water Sodium Burn Pit 1
006	Storm water Sodium Burn Pit 2
007	Storm water Building 100
008	Storm water Happy Valley
009	Storm water WS-13 drainage
010	Storm water Building 203
011	Perimeter Pond
012	Alfa Test Stand
013	Bravo Test Stand
014	Advanced Propulsion Test Facility
015	STP 1 – effluent
016	STP 2 – effluent
017	STP 3 – effluent
018	R-2 Pond spillway

20. Water used at SSFL for personnel and for industrial purposes is supplied by both the Calleguas Water District and a bottled water supplier. The water used for industrial purposes may be discharged to the onsite streambeds and watercourse ponds.
21. The SSFL utilizes a system of natural and man-made unlined ponds and channels to collect and reuse water as a cooling media and for fire suppression during rocket engine and component hot-fire testing and to provide for storm water settling. Water supplied to the system comes from any one or a combination of the following sources: storm water, treated groundwater, recycled test cooling water, or domestic water purchased from an

established purveyor. The water is stored in a series of steel tanks located in a portion of the facility designated as Area II. The water is gravity fed to either the Alfa or Bravo test facilities for use as cooling and fire protection water during test operations. Excess water from these operations is returned to the ponds through open, unlined channels. The water is then pumped back to the storage tanks at Skyline for reuse. If the demand for water exceeds the reclaimed water supply, domestic water is used to make up the difference.

22. The water reclamation system located onsite consists of five active ponds used for collection and storage: R-1 Pond (capacity 3.7 million gallons), Perimeter Pond (capacity 1.3 million gallons), Silvernale Pond (capacity 6.0 million gallons), R2-A Pond (capacity 2.5 million gallons), and R2-A Pond (capacity 200,000 gallons). These ponds are located throughout the developed portion of the site. The treated groundwater, engine test stand wastewater, and collected storm water may travel around the site for months prior to being discharged off-site. The natural watercourses located on-site are waters of the United States and are subject to regulation under the NPDES provisions of the Federal Water Pollution Control Act [commonly known as the Clean Water Act (CWA)].
23. Area I utilizes the R-1 Pond as a reservoir for the reclaimed water system. Water retained in the R-1 Pond is comprised of primarily effluent from groundwater treatment systems as well as runoff from seasonal rain events. If the supply of reclaimed water exceeds requirements, the R-1 Pond is discharged into Perimeter Pond, thence to Bell Creek through Outfall 001.
24. Areas II, III and IV share a common system for reclaimed water collection and distribution, collectively referred to as Area IV. Area IV uses Silvernale Pond and R-2A Pond as reservoirs. The primary source of water stored in the ponds comes from groundwater treatment operations. Other sources include cooling water runoff from test operations and seasonal rain events. If the supply of reclaimed water exceeds requirements, the water is discharged to R-2A Pond, and thence to Bell Creek through Outfall 002.

III. Beneficial Uses

25. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan)* as amended on January 27, 1997, by Regional Board Resolution No. 97-02. The *Basin Plan* (i) designates beneficial uses for surface and groundwaters; (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state antidegradation policy (*Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Board Resolution No. 68-16, October 28, 1968); and (iii) describes implementation programs to protect all waters in the Los Angeles Region. In addition, the *Basin Plan* incorporates all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.

26. The receiving water for Outfalls 001 and 002 is Bell Creek and subsequently the Los Angeles River. The receiving waters for discharges from Outfall 008 are Dayton Canyon Creek, Chatsworth Creek, Bell Creek, and subsequently the Los Angeles River. The *Basin Plan* contains water quality objectives for, and lists the following beneficial uses for Dayton Canyon Creek, Bell Creek, and the Los Angeles River as follows:

Dayton Canyon Creek – Hydrologic Unit 405.21

- Existing: Wildlife Habitat (WILD)
- Intermittent: Groundwater Recharge (GWR)
Contact Water Recreation (REC-1)
Non-Contact Water Recreation (REC-2)
Warm Freshwater Habitat (WARM)
- Potential: Municipal and Domestic Supply (MUN)

Bell Creek – Hydrologic Unit 405.21

- Existing: Wildlife Habitat (WILD)
- Intermittent: Groundwater Recharge (GWR)
Contact Water Recreation (REC-1)
Non-Contact Water Recreation (REC-2)
Warm Freshwater Habitat (WARM)
- Potential: Municipal and Domestic Supply (MUN)

Los Angeles River upstream of Figueroa Street – Hydrologic Unit 405.21

- Existing: Wetland Habitat (WET)
Groundwater Recharge (GWR)
Contact Water Recreation (REC-1)
Non-Contact Water Recreation (REC-2)
Warm Freshwater Habitat (WARM)
Wildlife Habitat (WILD)
- Potential: Industrial Service Supply (IND)
Municipal and Domestic Supply (MUN)

27. The receiving water for discharges from Outfalls 003 through 007 is the Arroyo Simi. The Arroyo Simi is tributary to the Arroyo Las Posas and subsequently Calleguas Creek. The *Basin Plan* contains water quality objectives for, and lists the following beneficial uses for the Arroyo Simi, Arroyo Las Posas, and Calleguas Creek as follows:

Arroyo Simi – Hydrologic Unit 403.62

Existing: Rare, Threatened, or Endangered Species Habitat (RARE)
Wildlife Habitat (WILD)

Intermittent: Freshwater Replenishment (FRSH)
Industrial Service Supply (IND)
Groundwater Recharge (GWR)
Contact Water Recreation (REC-1)
Non-Contact Water Recreation (REC-2)
Warm Freshwater Habitat (WARM)

Potential: Municipal and Domestic Supply (MUN)

Arroyo Las Posas – Hydrologic Unit 403.62

Existing: Groundwater Recharge (GWR)
Freshwater Replenishment (FRSH)
Contact Water Recreation (REC-1)
Non-Contact Water Recreation (REC-2)
Warm Freshwater Habitat (WARM)
Wildlife Habitat (WILD)

Potential: Industrial Process Supply (PROC)
Agricultural Supply (AGR)
Cold Freshwater Habitat (COLD)
Industrial Service Supply (IND)
Municipal and Domestic Supply (MUN)

Calleguas Creek above Potrero Road – Hydrologic Unit 403.12

Existing: Industrial Service Supply (IND)
Industrial Process Supply (PROC)
Agricultural Supply (AGR)
Groundwater Recharge (GWR)
Contact Water Recreation (REC-1)
Non-Contact Water Recreation (REC-2)
Warm Freshwater Habitat (WARM)
Wildlife Habitat (WILD)

Potential: Municipal and Domestic Supply (MUN)

IV. Compliance History

28. On June 29, 1998, the Regional Board adopted Order No. 98-051 that prescribed waste discharge requirements to the Permittee for the discharge of storm water runoff and wastewater from SSFL.
29. On June 27, 2001, the Regional Board issued a Notice of Violation (NOV) to the Permittee for violations of the effluent limits and monitoring and reporting requirements set forth in Board Order No. 98-051. The Permittee's effluent discharges exceeded the limits for cadmium (Cd), thallium (Tl), total coliform, total suspended solids (TSS), Hg, Cu, BOD₅, O&G, Sb, and NO₂ + NO₃ as N from January 2000 through March 2001 from various discharge outfalls at the SSFL site.
30. On October 19, 2001, the Regional Board issued a Revised NOV to the Permittee, which resulted in rescinding seven effluent limit violations and two monitoring and reporting violations due to laboratory error.
31. On April 29, 2002, the Regional Board issued Complaint No. R4-2002-0084 for Mandatory Minimum Penalty to the Permittee in the amount of \$39,000 for effluent limit violations of Hg, Tl, O&G, total coliform, settleable solids, NO₂ + NO₃ as N, and fluoride from January 2000 through April 2001. Boeing waived a hearing, and paid \$33,000 to the State Board Cleanup and Abatement Account. The remaining \$6,000 was used to fund a Regional Board approved Supplemental Environmental Project.
32. On February 6, 2004, the Regional Board issued an NOV to the Permittee for violations of effluent limits set forth in Board Order No. 98-051. The Permittee's effluent exceeded the limits for Sb, Cd, Cu, TSS, and turbidity from August 1998 through November 2003. The NOV required submittal of a report detailing the corrective actions taken by the Permittee to achieve compliance with Board Order No. 98-051.
33. In a letter dated March 8, 2004, the Permittee responded to the February 6, 2004 NOV and detailed the corrective actions it had taken at the site.
34. On July 1, 2004, the Regional Board adopted Order No. R4-2004-0111, which replaced Order No. 98-051. Order No. R4-2004-0111 prescribes waste discharge requirements to the Permittee for the discharge of storm water runoff and wastewater from SSFL.
35. On March 14, 2005, the Regional Board issued an NOV to the Permittee for violations of the effluent limits set forth in Board Order No. R4-2004-0111. The Permittee's effluent exceeded the limits for Cu, Hg, TCDD, and pH during the 4th Quarter 2004. The NOV required submittal of a report detailing the corrective actions taken by the Permittee to achieve compliance with Board Order No. R4-2004-0111.
36. In a letter dated April 14, 2005, the Permittee, in response to the March 14, 2005 NOV, submitted a report detailing corrective actions taken. The Permittee stated that most of

the exceedances were a result of a combination of natural causes, new constituents, effluent limits, or methodologies in the renewed permit. The Permittee also stated that it planned to request that the permit be modified.

37. On October 7, 2005, the Regional Board issued an NOV to the Permittee for violations of effluent limits set forth in Board Order No. R4-2004-0111. The Permittee's effluent exceeded the limits for Hg, TCDD, TRC, O&G, sulfate, MBAS, Cr, Fe, Pb, Mn, TDS, and chronic toxicity from 1st Quarter 2005 through 2nd Quarter 2005. The NOV required a report detailing the corrective actions taken by the Permittee to achieve compliance with Board Order No. R4-2004-0111.
38. In a letter dated November 4, 2005, the Permittee, in response to the October 7, 2005 NOV, again stated that the permit exceedances were consistent with the presence of naturally occurring constituents in site soils or in ash from area wildfires, rather than a result of site operations. Furthermore, the Permittee stated that while they had made significant improvements to their Best Management Practices (BMPs) in 2005 to control runoff and attempted to bring their discharges into full compliance with waste discharge requirements, the September 28, 2005 Topanga Wildfire had destroyed most of the Permittee's BMPs. The Permittee also stated that BMPs were then being restored.
39. On November 22, 2005, pursuant to section 13267 of the California Water Code, the Regional Board issued a directive to the Permittee to submit a technical report including a workplan outlining how and when the Permittee proposed to meet the final effluent limitations.
40. On November 30, 2005, the Regional Board issued Cleanup and Abatement Order (CAO) No. R4-2005-0077 to the Permittee. The CAO was issued in response to chronic exceedances of effluent limits contained in Regional Board Order Nos. 98-051 and R4-2004-0111 as well as the increased threat of erosion of soil and ash resulting from the Topanga wildfire. The CAO ordered the Permittee to: (i) initiate a cleanup and abatement program including the implantation of all BMPs necessary to abate impacts of any erosion and ash deposition to navigable waters of the United States; (ii) implement corrective and preventative actions to bring the Permittee's discharge into full compliance with Effluent Limitations and Receiving Water Requirements contained in Regional Board Order No. R4-2004-0111; and (iii) prepare a technical report summarizing the efforts being made to cleanup and abate the condition of pollution.

V. Impacts

41. The Permittee discharged over 118.5 million gallons of wastewater that did not meet effluent limitations, from the period of October 17, 2004 through January 14, 2006, to the Los Angeles River via Bell Creek, and to Calleguas Creek via Arroyo Simi and Arroyo Las Posas, all of which are navigable waters of the United States. The water quality effects of the effluent limit violations, which are listed in Table 1 (attached), are of concern because of their potential effects on the beneficial uses and water quality

objectives for the navigable waters of the United States as identified in paragraphs 23 and 24 above. The discharge of over 118.5 million gallons of inadequately treated wastewater also created a risk to public health and a condition of pollution, and degraded navigable waters of the United States. The acutely toxic effects of copper, chlorine residual, and pH outside the permitted range to aquatic organisms have been well established. TCDD is a known carcinogen and has a large potential for bioaccumulation in animals and humans. In this case, there is no knowledge of any actual health or aquatic life effects resulting from the discharge.

VI. Sources of Information

42. The facts set forth above were obtained from the following sources:

- a. Regional Board Order No. R4-2004-0111, NPDES Permit No. 0001309
- b. Monitoring and Reporting Program No. CI 6027
- c. Complaint No. R4-2002-0084 dated April 29, 2002
- d. The Boeing Company, Response to Complaint No. R4-2002-0084, dated May 9, 2002
- e. The Boeing Company, Self-Monitoring Reports for the 4th Quarter 2004, 1st Quarter 2005, 2nd Quarter 2005, 4th Quarter 2005, and 1st Quarter 2006
- f. Notice of Violation dated March 14, 2005
- g. The Boeing Company, Response to March 14, 2005 Notice of Violation, dated April 14, 2005
- h. Notice of Violation dated October 7, 2005
- i. The Boeing Company, Response to October 7, 2005 Notice of Violation, dated November 4, 2005
- j. Cleanup and Abatement Order No. R4-2005-0077 dated November 30, 2005
- k. Notice of Violation dated April 20, 2006
- l. The Boeing Company, Response to April 20, 2006 Notice of Violation, dated May 31, 2006
- m. Notice of Violation dated November 7, 2006
- n. The Boeing Company, Response to November 7, 2006 Notice of Violation, dated December 7, 2006
- o. Office of Environmental Health Hazard Assessment, "Draft Public Health Goal for TCDD in Drinking Water", July 2005

VII. Alleged Violations

43. A total of seventy-nine (79) effluent violations were noted in the Permittee's self-monitoring reports for Sb, BOD5, chloride, Cr, Cu, TCDD, Fe, Pb, Mn, Hg, MBAS, (NO2+NO3) as N, O&G, pH, strontium-90, sulfate, TDS, and TRC for the period of October 17, 2004 through January 14, 2006. The violations are identified in Table 1. Regional Board staff concludes that the discharge of inadequately treated wastewater by the Permittee created a risk to public health, created a condition of pollution, adversely impacted beneficial uses, and degraded navigable waters of the United States.

44. As the owner and sole permittee, The Boeing Company bears responsibility to comply with all provisions of Order No. R4-2004-0111 and the CWC.
45. CWC § 13376 prohibits the discharge of pollutants to navigable waters of the United States, except as authorized by waste discharge requirements that implement provisions of the CWA.
46. The discharge of wastewater in violation of Order No. R4-2004-0111 to the Los Angeles River via Bell Creek and to Calleguas Creek via Arroyo Simi and Arroyo Las Posas, both navigable waters of the United States, constitutes a violation of CWC § 13376 and CWA § 301(a), 33 U.S.C. § 1311(a)
47. The Permittee is alleged to have violated Order No. R4-2004-0111, which specifies the following:

Discharge Requirements – Effluent Limitations (Section I.B., pages 29-34)

1. The pH of wastes discharged shall at all times be within the range 6.5 to 8.5.
2. Order No. R4-2004-0111 includes the following effluent limitations for chromium, copper, iron, mercury, MBAS, manganese, lead, TCDD, (NO₂+NO₃) as N, BOD₅, sulfate, and TDS from Outfalls 001 and 002.

Constituent	Unit of Measure	Discharge Limitations	
		Monthly Average	Daily Maximum
Chromium (VI) ¹	µg/L	8.1	16.3
Copper	µg/L	7.1	14.0
Iron	mg/L	----	0.3
Mercury	µg/L	0.05	0.10
MBAS	mg/L	----	0.5
Manganese	µg/L	----	50
Lead	µg/L	2.6	5.2
TCDD	µg/L	1.4E-08	2.8E-08
(NO ₂ +NO ₃) as N	mg/L	----	8.0
BOD ₅	mg/L	20	30
Sulfate	mg/L	----	300
TDS	mg/L	----	950

¹ The Discharger has the option to meet the hexavalent chromium limitations with a total chromium analysis

3. Order No. R4-2004-0111 includes the following effluent limitations for copper, mercury, TCDD, (NO₂+NO₃) as N, antimony, strontium-90, and TDS from Outfalls 003 through 007.

Constituent	Unit of Measure	Discharge Limitations	
		Monthly Average	Daily Maximum
Copper	µg/L	----	14.0
Mercury	µg/L	----	0.13
TCDD	µg/L	----	2.8E-08
(NO ₂ +NO ₃) as N	mg/L	----	10.0
Antimony	µg/L	----	6.0
Strontium-90	pCi/L	----	8
TDS	mg/L	----	850

4. Order No. R4-2004-0111 includes the following effluent limitation for O&G from Outfalls 008, 009, and 010.

Constituent	Unit of Measure	Discharge Limitations	
		Monthly Average	Daily Maximum
O&G	mg/L	----	15

5. Order No. R4-2004-0111 includes the following effluent limitation for TRC from Outfalls 015 through 017.

Constituent	Unit of Measure	Discharge Limitations	
		Monthly Average	Daily Maximum
TRC	mg/L	----	0.1

IX. Potential Civil Liability

48. CWC § 13385(a) states: "Any person who violates any of the following shall be liable civilly in accordance with this section:"
 (a)(1) Section 13376
 (a)(5) (Discharging without or in violation of an NPDES permit)
49. CWC § 13385(c) states: "Civil liability may be imposed administratively by the state board or a regional board pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 in an amount not to exceed the sum of both of the following:
- (1) Ten thousand dollars (\$10,000) for each day in which the violation occurs.

- (2) Where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars (\$10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.”
50. CWC § 13385(h) requires the Regional Board to assess a mandatory minimum penalty of three thousand dollars (\$3,000) for each serious violation. Pursuant to CWC § 13385(h) (2) a “serious violation” is defined as any waste discharge that violates the effluent limitations contained in the applicable waste discharge requirements for a Group II pollutant, as specified in Appendix A to § 123.45 of Title 40 of the Code of Federal Regulations, by 20 percent or more or for a Group I pollutant, as specified in Appendix A to § 123.45 of Title 40 of the Code of Federal Regulations, by 40 percent or more. Furthermore, CWC § 13385.1(a)(1) identifies a failure to file a discharge monitoring report required pursuant to CWC § 13383 for each complete period of 30 days following the deadline for submitting the report as a “serious violation.”
51. CWC § 13385(i) requires the Regional Board to assess a mandatory minimum penalty of three thousand dollars (\$3,000) for each violation whenever the permittee violates a waste discharge requirement effluent limitation in any period of six consecutive months, except that the requirement to assess the mandatory minimum penalty shall not be applicable to the first three violations within that time period.
52. The mandatory minimum civil liability authorized by the CWC for the 79 effluent limit violations of Order No. R4-2004-0111 noted in the Permittee’s self-monitoring reports during the period of October 17, 2004 through January 14, 2006 is \$228,000.

MANDATORY MINIMUM CIVIL LIABILITY

Penalty Category	Calculation	Total
<i>For failing to comply with Order No. R4-2004-0111, CWC § 13376, and CWA § 301(a)</i>	CWC § 13385(h) and (i): [55 serious violations x \$3,000/day] + [21 chronic violations x \$3,000/day]	\$228,000
MANDATORY MINIMUM CIVIL LIABILITY		\$228,000

53. The potential maximum civil liability authorized by the CWC for the violations described herein is \$790,000 under CWC § 13385(c)(1).
- a. Under § 13385(c)(1), the maximum civil liability that could be imposed by the Regional Board for violation of the CWC is \$10,000 per day per violation. The Permittee is alleged to have violated CWC § 13385 on 79 occasions between October

17, 2004 and January 14, 2006 by not complying with effluent limitations. Therefore, the maximum liability under CWC § 13385(c)(1) is:

$$79 \text{ violations} \times \$10,000 \text{ per day} = \$790,000$$

POTENTIAL MAXIMUM CIVIL LIABILITY

Penalty Category	Calculation	Total
<i>For failing to comply with Order No. R4-2004-0111, CWC § 13376, and CWA § 301(a)</i>	CWC § 13385(c)(1): 79 violations x \$10,000/day	\$790,000
POTENTIAL MAXIMUM CIVIL LIABILITY		\$790,000

X. Recommended Civil Liability

54. Pursuant to CWC § 13385(e), the Regional Board is required to consider the following factors in determining the amount of civil liability to be imposed: the nature, circumstances, extent, and gravity of the violations; susceptibility of the discharge to cleanup or abatement; the degree of toxicity of the discharge; with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability and economic benefit or savings, if any, resulting from the violation; and other matters as justice may require. CWC § 13385(e) also states "At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation."
- a. Nature, circumstances, extent, and gravity of the violations: The effluent limitations for Order No. R4-2004-0111 are designed to protect beneficial uses. Discharging effluent containing pollutants above effluent limitations is prohibited. The Permittee failed to comply with Order No. R4-2004-0111 between October 17, 2004 and January 14, 2006 by exceeding the limitations described in paragraph 43. Table 1 provides dates on which the violations occurred and the extent of the violations (exceedance concentrations and percent exceedance). The discharge of over 118.5 million gallons of inadequately treated wastewater and storm water created a risk to public health, resulted in a condition of pollution, and degraded navigable waters of the United States. Furthermore, beneficial uses as listed in paragraphs 23 and 24 may have been impacted. Boeing is a sophisticated permittee, engaged at the site in high-risk military and aerospace related activities that involve a variety of atypical toxic, and other non-conventional pollutants that pose a significant risk to human health and the environment in the event of a release. Given Boeing's resources, sophistication, and the risks involved in its activities, Boeing's chronic failure to have developed an

adequate infrastructure to prevent, and thereafter to abate conditions that give rise to repeated violations of its effluent limitations is exceedingly serious. Furthermore, the many neighbors who live downstream of Boeing's operations have passionately expressed repeated consternation about their exposure to SSFL's discharges. Their fear about the community's ongoing exposure to the pollutants amplifies the gravity of the violations, because each additional violation fuels their perception of vulnerability and continues to disrupt the adjacent communities and the quality of life of their residents.

- b. Susceptibility to cleanup or abatement of the discharge: The inadequately treated wastewater that was discharged into navigable waters of the United States was not susceptible to cleanup. The discharge joined with surface water from their respective watersheds and flowed downstream to the Los Angeles River.
- c. Degree of toxicity of the discharge: There were no analyses performed to determine the degree of toxicity of the discharge as a whole. The water quality and public health effects of the effluent limit violations listed in the tables above are of a greater concern because of the increased toxicity of some of the pollutants discharged. Discharging pollutants listed in Table 1 at concentrations exceeding the effluent limitations as set forth Order No. R4-2004-0111 has been shown to be toxic to fish and aquatic species to various extents. The effluent limit for copper ($14 \mu\text{g/L}$) and mercury ($0.13 \mu\text{g/L}$) in the permit are based on United States Environmental Protection Agency (USEPA) water quality criteria taken from the California Toxics Rule (CTR) to protect human health or aquatic life. The Permittee's highest concentration of copper during the period in question was $293 \mu\text{g/L}$, almost 300% over the limit. The highest concentration of mercury during the period in question was $0.89 \mu\text{g/L}$, almost 590% over the limit. The *Basin Plan* notes that chlorine residual and pH outside the permitted range can have acutely toxic effects to aquatic organisms. TCDD has been identified as a known carcinogen by the International Agency for Research on Cancer, the U.S. National Toxicology Program, and the U.S. Environmental Protection Agency. TCDD has a long residence time in the environment and a large potential for bioaccumulation in animals and humans. The effluent limit for TCDD ($2.8\text{E-}08 \mu\text{g/L}$) is based on carcinogenicity at 1-in-a-million risk level. The highest concentration of TCDD during the period in question was $1.92\text{E-}4 \mu\text{g/L}$, over 685,614% over the limit. No knowledge of any actual health or aquatic life effects resulting from the Permittee's discharge has been documented.
- d. The ability of the Permittee to pay: Based on publicly available information, the Permittee has the ability to pay a liability of \$790,000.
- e. The effect on its ability to continue business: Based on publicly available information, a liability of \$790,000 would not have an effect on the Permittee's ability to continue business.

- f. Any voluntary cleanup efforts undertaken: The Permittee is required to comply with all provisions and limitations of Order No. R4-2004-0111 and the CWC. Therefore, any cleanup efforts undertaken would not be considered voluntary in nature.
 - g. Prior history of violations: Between August 1998 and January 14, 2006, the Permittee has reported 132 effluent limit exceedances. On April 29, 2002, the Regional Board issued Complaint No. R4-2002-0084 for Mandatory Minimum Penalty to the Permittee in the amount of \$39,000 for 13 effluent limit violations of Hg, Tl, O&G, total coliform, settleable solids, NO₂ + NO₃ as N, and fluoride from January 2000 through April 2001. Boeing waived a hearing, and paid the full amount.
 - h. Degree of culpability: The Permittee owns, and is the permit holder for the SSFL. The Permittee has the sole responsibility for the discharges. The Permittee has chronically exceeded permit limitations since at least August 1998. The Permittee has been aggressively implementing BMPs to try to bring the facility into compliance but has not been able to eliminate all violations. Based on the Permittee's sampling data and history of pollution prevention and source reduction, the BMPs installed by the Permittee may have contributed to a minor reduction in the extent of the violations.
 - i. Economic benefit or savings: The Regional Board lacks sufficient information to determine if the Permittee enjoyed an economic benefit or savings, except for the presumed opportunity costs the Permittee did not have to suffer as a result of not having taken measures to ensure compliance. Such costs and benefits have not been quantified.
 - j. Other matters as justice may require: The violations documented in Table 1 are all violations of permit conditions but have varying degrees of impact on water quality and beneficial uses. The Executive Officer has considered assessing liability based, in part, on an evaluation of the type of pollutant, magnitude of the exceedance, and relative impact of each violation on water quality and beneficial uses. Greater liabilities were assessed for exceedances that are more serious.
55. After consideration of the factors in CWC § 13385(e), the Executive Officer recommends that administrative civil liability be imposed on the Permittee by the Regional Board in the amount of \$471,190, which includes the following:
- a. An assessment of \$464,190 for violations of CWC § 13385 on 79 occasions between October 17, 2004 and January 14, 2006 by not complying with effluent limitations.
 - b. A reimbursement of \$7,000 in Regional Board staff costs. The Board incurred staff costs in evaluating the incidents of violation and preparing this Complaint and related documents. Regional Board staff time to investigate the violations and prepare the Complaint and Staff Report totaled 100 hours. The Regional Board charges a rate of

\$70 per hour of staff cost recovery. Thus, the total staff cost for this enforcement action is \$7,000.

$$(100 \text{ hours} \times \$70/\text{hour}) = \$7,000$$

RECOMMENDED CIVIL LIABILITY

Penalty Category	Calculation	Total
<i>For failing to comply with Order No. R4-2004-0111, CWC § 13376, and CWA § 301(a)</i>	CWC § 13385(c)(1): 79 violations (See Table 1)	\$464,190
<i>Reimbursement for staff costs</i>	100 hours x \$70/hour	\$7,000
TOTAL RECOMMENDED PENALTY		\$471,190

56. The Administrative Civil Liability is due and payable and must be received by the Regional Board by the close of business on August 27, 2007.

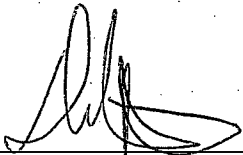
XI. Waiver of Hearing

57. The Permittee may waive the right to a hearing. Should the Permittee choose to waive the right to a hearing, an authorized agent must sign the waiver form attached to this Complaint and return the executed waiver form to the Regional Board at 320 West 4th Street, Suite 200, Los Angeles, CA 90013 to be received by the Regional Board by the close of business on August 27, 2007. If the hearing is waived, the following options are available to satisfy the civil liability:

- a. A check in the amount of \$471,190 (payable to the State Water Resources Control Board Cleanup and Abatement Account) shall accompany the signed waiver, or
- b. The Permittee may pay up to \$235,595 (50%) of the administrative civil liability by contributing towards a SEP listed on the Regional Board approved SEP List at www.swrcb.ca.gov/rwqcb4/html/programs/enforcement.html. To the greatest degree practicable, there must be a nexus demonstrated between the violations cited in this Complaint and the chosen SEP.

In the event that the Permittee elects to contribute to a SEP, a check in the amount of \$235,595 (payable to the State Water Resources Control Board Cleanup and Abatement Account) shall accompany the signed waiver along with proof of payment of the balance of the assessment to the approved SEP.

58. Notwithstanding the issuance of this Complaint, the Regional Board shall retain the authority to assess additional penalties for violations of the requirements of the Permittee's waste discharge requirements for which penalties have not yet been assessed or for violations that may subsequently occur.
59. This enforcement action is exempt from the provisions of the California Environmental Quality Act, California Public Resources Code § 21000 et seq., in accordance with California Code of Regulations, title 14, § 15321.
60. Regulations of the U.S. Environmental Protection Agency require public notification of any proposed settlement of the civil liability occasioned by violation of the Clean Water Act including NPDES permit violations. Accordingly, interested persons will be given 30 days to comment on any proposed settlement of this Complaint.
61. In the event that the Permittee fails to comply with the requirements of this Complaint, the Executive Officer is authorized to refer this matter to the Office of Attorney General for enforcement.



Deborah J. Smith
Interim Executive Officer

July 25, 2007

WAIVER OF THE RIGHT TO A HEARING

By signing below and returning this Waiver, I hereby waive the right of The Boeing Company to a hearing before the Regional Board to dispute the allegations and civil liability set forth in Administrative Civil Liability Complaint No. R4-2007-0035 (Complaint) issued by the Regional Board Executive Officer. The Boeing Company understands that this Waiver gives up the rights to contest the allegations of the Complaint and the amount of civil liability it imposes.

The Boeing Company elects to pay the civil liability in the following manner [check the relevant box].

- ☐ Enclosed herewith in full payment of the civil liability is a \$471,190 check payable to "State Water Resources Control Board Cleanup and Abatement Account."

Or

- ☐ Enclosed herewith are a \$235,595 check payable to "State Water Resources Control Board Cleanup and Abatement Account" and proof of payment of at least \$235,595 to a Supplemental Environmental Project (SEP) listed on the Regional Board-approved SEP list.

The Boeing Company understands that this Waiver gives up the rights to argue against the allegations made by the Executive Officer in this Complaint and against imposition of, and amount of, civil liability imposed. The Boeing Company also understands that if an Administrative Civil Liability Order is adopted by the Regional Board, payment in full will be due thirty days after the date of the adoption of the Order.

I hereby affirm that I am duly authorized to act on behalf of and to bind the Boeing Company in the making and giving of this Waiver.

The Boeing Company

Date: _____

By: _____
(Signed name)

(Printed or typed name)

Position: _____

Table 1

Violation Summary for
The Boeing Company
Santa Susana Field Laboratory
CI 6027

Administrative Civil Liability
Complaint No. R4-2007-0035

Date	Outfall	Monitoring Period	Violation Type	Parameter	Reported Value	Permit Limit	Units
10/17/04	003	4 Q 2004	Instantaneous Maximum	pH	9.13	6.5-8.5	pH units
10/17/04	004	4 Q 2004	Daily Maximum	Cu	15	14	µg/L
10/17/04	005	4 Q 2004	Daily Maximum	TCDD	3.32E-08	2.80E-08	µg/L
10/17/04	004	4 Q 2004	Daily Maximum	TCDD	7.08E-08	2.80E-08	µg/L
10/17/04	003	4 Q 2004	Daily Maximum	TCDD	8.51E-08	2.80E-08	µg/L
10/17/04	006	4 Q 2004	Daily Maximum	TCDD	1.92E-04	2.80E-08	µg/L
10/20/04	010	4 Q 2004	Instantaneous Maximum	pH	9.4	6.5-8.5	pH units
10/27/04	006	4 Q 2004	Instantaneous Minimum	pH	6.29	6.5-8.5	pH units
12/05/04	003	4 Q 2004	Daily Maximum	TCDD	4.50E-08	2.80E-08	µg/L
12/27/04	005	4 Q 2004	Daily Maximum	Hg	0.2	0.1	µg/L
12/27/04	006	4 Q 2004	Daily Maximum	Hg	0.22	0.1	µg/L
12/27/04	006	4 Q 2004	Instantaneous Maximum	pH	9.7	6.5-8.5	pH units
12/28/04	002	4 Q 2004	Daily Maximum	TCDD	3.70E-08	2.80E-08	µg/L
12/28/04	002	4 Q 2004	Daily Maximum	Hg	0.21	0.1	µg/L
12/31/04	002	4 Q 2004	Daily Maximum	Hg	0.32	0.1	µg/L
01/03/05	005	1 Q 2005	Daily Maximum	TCDD	3.10E-08	2.80E-08	ug/L
01/03/05	004	1 Q 2005	Daily Maximum	Hg	0.23	0.13	ug/L
01/10/05	017	1 Q 2005	Daily Maximum	TRC	5	0.1	mg/L
01/11/05	009	1 Q 2005	Daily Maximum	O&G	16	15	mg/L
01/11/05	015	1 Q 2005	Daily Maximum	TRC	1	0.1	mg/L
01/11/05	017	1 Q 2005	Daily Maximum	TRC	1	0.1	mg/L
01/18/05	002	1 Q 2005	Daily Maximum	Hg	0.23	0.1	ug/L
01/18/05	001	1 Q 2005	Daily Maximum	Hg	0.26	0.1	ug/L
02/04/05	002	1 Q 2005	Daily Maximum	Sulfate	310	300	mg/L
02/11/05	001	1 Q 2005	Daily Maximum	Cr	27	16.3	ug/L
02/11/05	001	1 Q 2005	Daily Maximum	TCDD	4.71E-08	2.80E-08	ug/L
02/11/05	001	1 Q 2005	Daily Maximum	Pb	9.7	5.2	ug/L
02/11/05	001	1 Q 2005	Daily Maximum	MBAS	1	0.5	mg/L
02/11/05	001	1 Q 2005	Daily Maximum	Mn	370	50	ug/L
02/11/05	001	1 Q 2005	Daily Maximum	Fe	27	0.3	mg/L
02/18/05	001	1 Q 2005	Daily Maximum	Mn	140	50	ug/L
02/18/05	001	1 Q 2005	Daily Maximum	TCDD	6.52E-07	2.80E-08	ug/L
02/18/05	007	1 Q 2005	Daily Maximum	TCDD	6.98E-07	2.80E-08	ug/L
02/18/05	001	1 Q 2005	Daily Maximum	Fe	9.2	0.3	mg/L
02/26/05	001	1 Q 2005	Daily Maximum	Fe	0.45	0.3	mg/L
02/28/05	001	1 Q 2005	Monthly	TCDD	4.71E-08	1.40E-08	ug/L
03/26/05	001	1 Q 2005	Daily Maximum	Fe	0.42	0.3	mg/L
04/01/05	002	2 Q 2005	Daily Maximum	Sulfate	310	300	mg/L
04/08/05	002	2 Q 2005	Daily Maximum	Sulfate	360	300	mg/L
04/15/05	002	2 Q 2005	Daily Maximum	Sulfate	400	300	mg/L
04/22/05	002	2 Q 2005	Daily Maximum	TDS	1,000	950	mg/L
04/22/05	002	2 Q 2005	Daily Maximum	Sulfate	400	300	mg/L

Table 1

Violation Summary for
The Boeing Company
Santa Susana Field Laboratory
CI 6027

Administrative Civil Liability
Complaint No. R4-2007-0035

Date	Outfall	Monitoring Period	Violation Type	Parameter	Reported Value	Permit Limit	Units
04/28/05	001	2 Q 2005	Daily Maximum	Fe	0.36	0.3	mg/L
04/28/05	001	2 Q 2005	Daily Maximum	TCDD	3.73E-08	2.80E-08	ug/L
04/28/05	003	2 Q 2005	Daily Maximum	Strontium-90	11.4 +/- 0.82	8	pCi/L
04/28/05	002	2 Q 2005	Daily Maximum	TCDD	6.28E-07	2.80E-08	ug/L
10/17/05	009	4 Q 2005	Instantaneous Maximum	pH	8.8	6.5-8.5	pH units
10/18/05	007	4 Q 2005	Daily Maximum	Sb	6.2	6	ug/L
10/18/05	006	4 Q 2005	Daily Maximum	Cu	16	14	ug/L
10/18/05	003	4 Q 2005	Daily Maximum	Cu	17	14	ug/L
10/18/05	006	4 Q 2005	Daily Maximum	TCDD	3.40E-08	2.80E-08	ug/L
10/18/05	007	4 Q 2005	Daily Maximum	Cu	19	14	ug/L
10/18/05	005	4 Q 2005	Daily Maximum	(NO ₂ +NO ₃) as N	16	10	mg/L
10/18/05	004	4 Q 2005	Daily Maximum	Hg	0.22	0.13	ug/L
10/18/05	005	4 Q 2005	Daily Maximum	Cu	30	14	ug/L
10/18/05	005	4 Q 2005	Daily Maximum	Hg	0.41	0.13	ug/L
10/18/05	007	4 Q 2005	Daily Maximum	TCDD	3.17E-07	2.80E-08	ug/L
10/18/05	005	4 Q 2005	Daily Maximum	TCDD	1.36E-06	2.80E-08	ug/L
10/18/05	004	4 Q 2005	Daily Maximum	TCDD	5.86E-06	2.80E-08	ug/L
11/09/05	005	4 Q 2005	Daily Maximum	Cu	20	14	ug/L
11/09/05	006	4 Q 2005	Daily Maximum	Cu	34	14	ug/L
11/09/05	003	4 Q 2005	Daily Maximum	Sb	35	6	ug/L
11/09/05	006	4 Q 2005	Daily Maximum	Hg	0.89	0.13	ug/L
11/09/05	005	4 Q 2005	Daily Maximum	TCDD	1.76E-06	2.80E-08	ug/L
11/09/05	006	4 Q 2005	Daily Maximum	TCDD	1.89E-06	2.80E-08	ug/L
11/09/05	004	4 Q 2005	Daily Maximum	TCDD	3.43E-06	2.80E-08	ug/L
11/09/05	003	4 Q 2005	Instantaneous Maximum	pH	9.4	6.5-8.5	pH units
01/01/06	005	1Q2006	Daily Maximum	Chloride	160	150	mg/L
01/01/06	002	1Q2006	Daily Maximum	BOD ₅	33	30	mg/L
01/01/06	005	1Q2006	Daily Maximum	TDS	980	850	mg/L
01/01/06	002	1Q2006	Daily Maximum	(NO ₂ +NO ₃) as N	10	8	mg/L
01/01/06	005	1Q2006	Daily Maximum	(NO ₂ +NO ₃) as N	51	10	mg/L
01/01/06	007	1Q2006	Daily Maximum	TCDD	3.25E-07	2.80E-08	ug/L
01/02/06	001	1Q2006	Daily Maximum	Fe	626	400	lbs/day
01/02/06	001	1Q2006	Daily Maximum	Cu	55	14	ug/L
01/02/06	001	1Q2006	Daily Maximum	Pb	160	5.2	ug/L
01/02/06	001	1Q2006	Daily Maximum	TCDD	4.60E-06	2.80E-08	ug/L
01/02/06	001	1Q2006	Daily Maximum	Fe	92	0.3	mg/L
01/14/06	004	1Q2006	Daily Maximum	TCDD	3.17E-08	2.80E-08	ug/L